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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/393,126	09/10/1999	ROBERTO AIELLO	FANT-99-002	2279

7590 07/01/2002

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EXAMINER

TRAN, MAIKHANH

ART UNIT

PAPER NUMBER

2664

DATE MAILED: 07/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/393,126

Applicant(s)

AIELLO ET AL.

Examiner

MAIKHANH T. TRAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 51-75, 88, 89 and 93-143 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 51-75, 88, 89, 93-103 and 105-143 is/are allowed.
- 6) ☒ Claim(s) 104 is/are rejected.
- 7) ☒ Claim(s) 106, 113, 135, 141 and 143 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Applicant respond filed on 4/16/02 has been fully considered and made of record. By this amendment, claims 104, 105, 110, 130, 133, 141, and 143 have been amended. Claims 51-75, 88-89, 93-143 are now pending.

Claim Objections

1. Claims 106, 113, 135, 141 and 143 are objected to because of the following informalities:

- In claim 106, line 10; claim 113, line 7; claim 135, line 10: should the phrase "said master having" be changed to --said master device having-- ?

- In claims 141 and 143, line 5, should the phrase " at least two other transceiver" be changed to --at least two other transceivers--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 104 is rejected under 35 U.S.C. 103(a) as being unpatentable over Paneth et al (U.S. 6,014,374) in view of Fullerton et al. (U.S. 6,031,862).

- Paneth et al., in figs. 1, 4 and the description associated with the figures disclose a wireless communication network system comprising at least three transceivers, each transceiver having a transmitter and a receiver, one of said transceivers (inside 11) being structured and configured as a master device, said master device structured and configured to manage data transmission between said master device and said at least two other transceivers (10) and direct data transmission between said at least two transceivers (the master device itself and one of the other transceivers).

Paneth et al., however, fail to fairly suggest that said transmitters are structured and configured to emit RF pulses operating with UWB wireless technology and said receivers are structures and configured to receive RF pulses.

Fullerton et al., in abstract, introduce an impulse radio technology/UWB time domain used in wireless communications system wherein an impulse radio link can communicate many independent channels simultaneously by employing different subcarriers for each channel. Therefore it would have been obvious to ones skilled in the art at the time the invention was made to apply Fullerton et al's teaching in Paneth et al' by using UWB time domain and subcarriers in Paneth et al. to enable transceivers to transfer data to other said transceivers simultaneously to increase the transmission in Paneth et al ' system.

Allowable Subject Matter

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4. Claims 51-75, 88-89, 93-103, and 105-143 are allowed.

5. The following is a statement of reasons for the indication of allowable subject matter:

- As to claims 51-75, 88-89, 93-103, 106-109, 121-127 and 135-137, the prior art of the record fail to teach that the system further comprising a specific MAC unit/hardware interface (as recited in claims 51, 93, 106, 121, 135-136);

- As to claims 113-117, 118-120, 138-140, the prior art fail to teach that said master having a protocol operating in slotted ALOHA mode and TDMA mode and the master device managing said protocol and said data slots in said protocol.

- As to claims 128-129, the prior art fail to teach that said transmitters are structured and configured to emit RF pulses operating with baseband wireless technology and transfer data to other said transceivers isochroneously.

- As to claims 105, 110-112, 130-134, and 141-143, the prior art of the record fail to teach that the master structured and configured to direct data transmission between said at least two other transceivers (as recited in claim 105) or between said at least three transceivers (as recited in claims 110, 130, 133, 141 and 143).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MAIKHANH T. TRAN** whose telephone number is 703-308-7911. The examiner can normally be reached on **MON-FRI 8:30AM - 6:00 PM**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **WELLINGTON CHIN** can be reached on 703-305-4366. The fax phone

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numbers for the organization where this application or proceeding is assigned are 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Maikhanh Tran

June 30, 2002

A handwritten signature in black ink, appearing to read 'W. Chin', with a long horizontal line extending to the right.

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600